TES PATENT AND TRADEMARK OFFICE

In re application

Mathias Färnegårdh, Tomas Bonn, Sherry Sun, Jan Ljunggren, Harri

Ahola, and Mats Carlquist

Serial No.

10/540,612

Filed

June 23, 2005

For

CRYSTALLINE LIVER X RECEPTOR BETA PROTEIN

Examiner

Attorney Docket

102769-102

Group Art Unit

Confirmation No.

9118

Customer No.

27267

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, 19 AUG 2006

P.O. Box 1450, Alexandria, VA 22313-1450 on _

Todd E. Garabedian, Ph.D. Registration No. 39,197

Attorney for Applicants

INFORMATION DISCLOSURE LETTER

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

The undersigned represents that the closest art of which he is presently aware has been cited herein and understands that this statement shall not be construed as a representation that no better art exists or that a thorough patentability search has been made.

The undersigned further represents that the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R.§ 1.56(b).

- 1. United States Patent Application Publication No. US 2004/0018560 A1 (BLEDSOE, RANDY K., ET AL.) 29 January 2004 (2004-01-29).
- 2. United States Patent No. 5,939,322 (RODAN, GIDEON A., ET AL.) 17 August 1999 (1999-08-17).
- 3. FÄRNEGÅRDH, MATHIAS, ET AL: The Three-dimensional Structure of the Liver X Receptor ß Reveals a Flexible Ligand-binding Pocket That Can Accommodate Fundamentally Different Ligands, THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 278, No. 40, Pages 38821-38828 (October 3, 2003).
- 4. WILLIAMS, SHAWN, ET AL: X-ray Crystal Structure of the Liver X Receptor ß Ligand Binding Domain, THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 278, No. 29, Pages 27138-27143 (July 18, 2003).
- 5. HOERER, STEFAN, ET AL.: Crystal Structure of the Human Liver X Receptor & Ligand-binding Domain in Complex with a Synthetic Agonist, THE JOURNAL OF MOLECULAR BIOLOGY, Vol. 334, No. 3, Pages 853-861 (December 12, 2003).
- 6. CRONET, PHILIPPE, ET AL.: Structure of the PPARa and -y Ligand Binding domain in Complex with AZ 242; Ligand Selectivity and Agonist Activation in the PPAR Family, ELSEVIER SCIENCE LTD., Vol. 9, Pages 699-706 (August, 2001).
- 7. DATABASE UNIPROT (Online): Retrieved from EBI, Database accession no. P55055 Uniprot, XP002289057, 100% identity in 461aa overlap with SEQ ID NO 1 Abstract (October 1, 1996).
- 8. SHINAR, DORON M., ET AL.: *NER*, a new member of the gene family encoding the human steroid hormone nuclear receptor, ELSEVIER SCIENCE B.V., Vol. 147, Pages 273-276 (1994).
- 9. URBAN, FRANK JR., ET AL.: The important role of residue F268 in ligand binding by LXRS, Federation of European Biochemical Societies, Published by ELSEVIER SCIENCE B.V., Vol. 484, Pages 159-163 (2000).
- 10. LOVE, JAMES D., ET AL.: The Structural Basis for the Specificity fo Retinoid-X receptor-selective Agonists: New Insights Into the Role of Helix H12, THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 277, No. 13, Pages 11385-11391 (March 29, 2002).

Applicants submit that copies of the above-cited references are enclosed herewith.

U. S. Application Serial No. 10/540,612 Attorney Docket No. 102769-102 Page 3 of 3

If the Examiner has any questions or feels that a discussion with Applicants' representative would expedite prosecution, the Examiner is invited and encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

MATHIAS FÄRNEGÅRDH, ET AL.

Date: 09 AUG 2006

Todd E. Garabedian, Ph.D. Registration No. 39,197

Attorney for Applicant(s)

WIGGIN AND DANA LLP

One Century Tower P. O. Box 1832

New Haven, CT 06508-1832

Telephone: (203) 498-4400

Fax: (203) 782-2889

\10706\100\53594.1

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT BY APPLICANT			ATTY. DOCKET NO. 10276	9-102	SERIAL NO.	10/540,612
/0.	10		APPLICANT: MATH	IAS FÄRNE	GÅRDH, ET	AL.
(AUG 1 4 2006 (M)			FILING DATE: JUNE 23, 2005		GROUP:	
1	\$	Ţ	J.S. PATENT DOCUMENTS			
EXAMINE TRACE	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPR.
	2004/0018560 A1	01/29/2004	Bledsoe, Randy K., et al.	G01N	33/53	
	5,939,322	08/17/1999	Rodan, Gideon A., et al.	C12N	15/12	
		FOI	REIGN PATENT DOCUMENTS			
DO	DOCUMENT NO.		COUNTRY	CLASS	SUBCLASS	TRANSLATION Yes No
					<u> </u>	
	OTHER DOCU	MENTS (INCLU	DING AUTHOR, TITLE, DATE, P.	ERTINENT PAG	ES, ETC.)	
	WILLIAMS, SHAWN, ET AL: X-ray Crystal Structure of the Liver X Receptor & Ligand Binding Domain, THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 278, No. 29, Pages 27138-2 (July 18, 2003). HOERER, STEFAN, ET AL.: Crystal Structure of the Human Liver X Receptor & Ligand-binding Domain in Complex with a Synthetic Agonist, THE JOURNAL OF MOLECULAR BIOLOGY, 334, No. 3, Pages 853-861 (December 12, 2003).					
	Domain in Comp. 334, No. 3, Pages	853-861 (De	ecember 12, 2003).			IOLOGY, V₀l.
	Domain in Comp. 334, No. 3, Pages CRONET, PHII	8853-861 (De IPPE, ET AL and Selectivity	ecember 12, 2003). .: Structure of the PPARa a and Agonist Activation in the	and −γ Ligan	d Binding dom	IOLOGY, Vol.
	Domain in Comp 334, No. 3, Pages CRONET, PHII with AZ 242; Lig LTD., Vol. 9, Pag DATABASE UN	S 853-861 (De LIPPE, ET AL and Selectivity ges 699-706 (IPROT (Onl	ecember 12, 2003). .: Structure of the PPARa a and Agonist Activation in the	and –y Ligand he PPAR Fam Database acce	d Binding dom ily, ELSEVIER	ain in Complex R SCIENCE 055 Uniprot,
	Domain in Comp 334, No. 3, Pages CRONET, PHII with AZ 242; Lig LTD., Vol. 9, Pag DATABASE UN XP002289057, 1 SHINAR, DORG	S 853-861 (De IPPE, ET AL and Selectivity ges 699-706 (IPROT (Onl 00% identity DN M., ET A	ecember 12, 2003). .: Structure of the PPAR a a and Agonist Activation in the August, 2001). ine): Retrieved from EBI, I	and –y Ligand he PPAR Fam Database acce LID NO 1 Al	d Binding dom ily, ELSEVIEN ession no. P550 ostract (Octob ly encoding the	ain in Complex R SCIENCE 055 Uniprot, er 1, 1996). human steroid
	Domain in Comp 334, No. 3, Pages CRONET, PHIL with AZ 242; Lig LTD., Vol. 9, Page DATABASE UN XP002289057, 1 SHINAR, DORG hormone nuclear in URBAN, FRANI	S 853-861 (De IPPE, ET AL and Selectivity ges 699-706 (IPROT (Onl 00% identity ON M., ET A receptor, ELSE (JR., ET AL ropean Bioche	ecember 12, 2003). .: Structure of the PPARa a and Agonist Activation in the August, 2001). ine): Retrieved from EBI, I in 461aa overlap with SEQ L.: NER, a new member of	and –γ Ligand he PPAR Fam Database acce LID NO 1 Al the gene fami l. 147, Pages due F268 in l	d Binding domily, ELSEVIER ssion no. P550 ostract (Octob ly encoding the 273-276 (1994) igand binding	ain in Complex R SCIENCE 055 Uniprot, er 1, 1996). human steroid 4). by LXRS,
	Domain in Comp 334, No. 3, Pages CRONET, PHII with AZ 242; Lig LTD., Vol. 9, Pag DATABASE UN XP002289057, 1 SHINAR, DORG hormone nuclear in URBAN, FRAND Federation of Eur Pages 159-163 (2 LOVE, JAMES I Agonists: New Inc.	S 853-861 (De IPPE, ET AL and Selectivity ges 699-706 (IPROT (Onl 00% identity ON M., ET A receptor, ELSE (IR., ET AL ropean Bioche 000). D., ET AL: Togget Into the	ecember 12, 2003). .: Structure of the PPARa a and Agonist Activation in the August, 2001). ine): Retrieved from EBI, I in 461aa overlap with SEQ L.: NER, a new member of VIER SCIENCE B.V., Vo.: The important role of residents.	and -\gamma Ligand he PPAR Fam Database access ID NO 1 All the gene fami 1. 147, Pages due F268 in length of the pecificity fo Report Notice of the pecificity for Report Notice of the pecific of the pecif	d Binding domily, ELSEVIER ssion no. P556 ostract (Octob ly encoding the 273-276 (199- igand binding R SCIENCE F etinoid-X recep BIOLOGICA	ain in Complex R SCIENCE 055 Uniprot, er 1, 1996). human steroid 4). by LXRS, 3.V., Vol. 484,

^{*}EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \10706\100\53595.1